

100083, 100087, 400083A

**MATERIAL SAFETY DATA SHEET****1. PRODUCT IDENTIFICATION**

TRADE NAME (AS LABELED): Miracle-Gro Lawn Food (36-6-6)

CHEMICAL NAMES, COMMON NAMES: Mixture

MANUFACTURERS NAME: Scotts Miracle-Gro Products Inc.

ADDRESS: 800 Port Washington Boulevard, Port Washington, NY 11050

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BUSINESS TELEPHONE AND HOURS OF OPERATION: 516-883-6550 8:00-5:00 Eastern time

**2. COMPOSITION AND INFORMATION ON INGREDIENTS\***

CHEMICAL NAME	CAS#	EXPOSURE LIMITS IN AIR				
		ACGIH		OSHA		OTHER
		TLV mg/m <sup>3</sup>	STEL mg/m <sup>3</sup>	PEL mg/m <sup>3</sup>	STEL mg/m <sup>3</sup>	IDLH mg/m <sup>3</sup>
Urea	57-13-6	10**	NE	15***	NE	NE
Potassium Nitrate	7757-79-1	10**	NE	15***	NE	NE
Monoammonium Phosphate	7722-76-1	10**	NE	15***	NE	NE
Iron EDTA	15708-41-5	10**	NE	15***	NE	NE

\* All ingredients in quantities > 1.0 % (0.1 % for carcinogens) that are **potentially** hazardous per OSHA definitions

NDA = no data available NE = not established

**Other standards:**

This product can generate a nuisance dust or a particulate not otherwise classifiable (PNOC)

\*\* PNOC (ACGIH) - 10 mg/m<sup>3</sup> [Inhalable Particulate], 3 mg/m<sup>3</sup> [Respirable Particulate]\*\*\* Nuisance Dust (OSHA) - 15 mg/m<sup>3</sup> [Total Dust], 5 mg/m<sup>3</sup> [Respirable Fraction]Urea; 10 mg/m<sup>3</sup> TWA, AIHA -WEEL**3. HAZARD INFORMATION****Emergency Overview:****Physical description:** Fine granules, light green color**Odor:** Slight ammonia odor**Potential Health Effects:** **CAUTION!** High dust concentrations may cause mild upper respiratory tract irritation with coughing and nasal discharge. Eye or skin contact may cause mild, transient irritation.**Fire Hazards:** This product is non-combustible. Personnel responding to a spill of this material should wear appropriate personal protective equipment.

<b>NFPA RATING:</b>	Health-1	Flammability-0	Reactivity-0	Special-NDA
<b>HMIS RATING:</b>	Health-1	Flammability-0	Reactivity-0	Protective Equipment-A

#### **4. FIRST AID MEASURES**

**Skin Contact:** Remove contaminated clothing. Flush affected area with water for 15 minutes. Wash affected area with mild soap and water. Seek medical attention if irritation develops or persists.

**Eye Contact:** Immediately flush eyes with plenty of water. Remove any contact lenses (if easy to do) and continue flushing for 15 minutes. Seek medical attention immediately if irritation develops or persists.

**Ingestion:** Immediately rinse mouth out with plenty of water. If within 30 minutes after ingestion, give person a small glass of water or milk-NEVER give anything by mouth to an unconscious person. Do not induce vomiting unless instructed to do so by a physician or poison center. Seek medical attention immediately.

**Inhalation:** Remove person to fresh air. Seek medical attention immediately if breathing becomes difficult.

#### **5. FIRE-FIGHTING MEASURES**

**Flashpoint (Method):** Non-Combustible

**Autoignition Temperature:** Not Applicable

**Flammable limits in air by volume, %:** Non-Combustible

**Extinguishing media:** Water spray, carbon dioxide, fine earth, dry chemical, or sand. Use extinguishing media appropriate for the surrounding fire.

**Hazardous products of combustion:** Carbon monoxide, carbon dioxide, nitrogen oxides (NO<sub>2</sub>, NO<sub>x</sub>), potassium and potassium containing compounds, chlorine and chlorine containing compounds (e.g HCl gas, phosgene), ammonia, cyanuric acid, cyanic acid, and phosphorus and phosphorus containing compounds (e.g. phosphine).

**Protective Equipment:** Fire-fighters must wear self-contained breathing apparatus.

**Unusual fire and explosion hazards:** Keep away from heat, sparks or flames. Flood with water to cool containers.

#### **6. ACCIDENTAL RELEASE MEASURES**

Extinguish all ignition sources. Shovel, sweep or scoop material into a suitable container and cover. Flush area with water. Do not attempt to clean-up spills without appropriate protective equipment (see Section 8). See Section 13 for information on the disposal of recovered material. Prevent large quantities from contacting vegetation or waterways. Keep animals away from large spills.

#### **7. HANDLING AND STORAGE**

**Work and hygienic practices:** Wash hands with soap and water after handling product. Follow specific use instructions supplied with product

**Storage and handling practices:** Store in cool, dry area in closed container or package. Keep containers closed at all times. Do not reuse containers. Store away from incompatible materials (see Section 10). Use with proper personal protective equipment (see Section 8). Keep out of reach of children.

**Protective practices during cleaning of application equipment:** Rinse all equipment after use. Collect all rinse water and apply to appropriate lawn/garden areas.

## **8. EXPOSURE CONTROLS - PERSONAL PROTECTION**

**Ventilation and engineering controls:** If industrial hygiene surveys show that exposures exceed TLV's or other exposure limits, use a combination of local exhaust and general dilution/ventilation to control exposures. If that is not feasible, see recommendations under "Respiratory Protection."

**Respiratory protection:** If concentrations are below all limits in Section 2, no respiratory protection is necessary. If concentrations exceed the limits in Section 2, NIOSH approved respiratory protection may be necessary. Seek professional advice prior to respirator selection or use. Follow OSHA respiratory regulations (29 CFR 1910.134). Use a positive pressure air supplied respirator if there is a potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection

**Eye protection:** Safety glasses with side shields are recommended.

**Hand protection:** Protective gloves recommended. Contact glove manufacturer for more information.

**Body protection:** Minimize skin contact.

**Safety equipment:** Eyewash and deluge shower recommended

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

**Vapor density:** Non-volatile

**Evaporation rate:** Not Applicable

**Specific gravity:** 0.80

**Melting point range:** 271°F - 631°F

**Solubility in water:** 28 gms./100 mls. water

**Boiling point:** Not Applicable

**Vapor pressure:** Non-volatile

**Appearance and color:** Fine granules, light green color.

**Odor:** Slight ammonia odor.

## **10. STABILITY AND REACTIVITY**

**Stability:** Stable at normal temperatures.

**Incompatible materials and conditions to avoid:** Excessive heat, contact with strong alkalis, fuels, other combustible materials, strong oxidizing agents (permanganate, dichromate, chlorine, etc.), strong acids (e.g. sulfuric acid), strong bases (e.g. sodium hydroxide) reducing agents, methanamine, and many chlorine compounds (e.g. sodium hypochlorite, sodium chlorate, pool chemicals, household bleach and other cleaning products). Active metals such as aluminum and magnesium.

**Hazardous polymerization:** Will not occur.

**Hazardous decomposition products:** Carbon monoxide, carbon dioxide, nitrogen oxides (NO<sub>2</sub>, NO<sub>x</sub>, HCN gas), potassium and potassium containing compounds, chlorine and chlorine containing compounds (e.g. HCl gas, phosgene), ammonia, cyanuric acid, cyanic acid, and phosphorus and phosphorus containing compounds (e.g. phosphine).

## **11. TOXICOLOGICAL INFORMATION**

**Product based: (Information Intended for Medical Care Personnel)**

There are limited data regarding this product. Exposure to this product can occur by eye and skin contact, ingestion, or inhalation of dusts. Eye contact may cause slight, temporary irritation. Skin contact may cause mild irritation. Ingestion may cause nausea, vomiting along with mild irritation to the mouth, throat, esophagus and stomach. High dust concentrations may cause mild respiratory tract irritation with coughing and nasal discharge.

**Ingredient based: (Information Intended for Medical Care Personnel)**

This product contains **urea** (CAS#57-13-6) and is affirmed as generally recognized as safe (GRAS) in accordance with U.S. FDA, 21 CFR, 184. Exposure can occur by eye or skin contact, ingestion, or inhalation of dusts or mists. Eye contact with an unspecified amount of urea powder has caused reversible corneal opacity along with irritation as a foreign body in the eye with tearing, and blinking. Skin contact with powdered urea is not expected to cause irritation. Dermal absorption is expected to be minimal (6-11%). Ingestion is expected to cause nausea, vomiting, and possible excitement and convulsions. **These high exposure levels are not considered relevant to occupational or normal use exposure situations.** The rat-oral LD50 for urea is 8471 mg/kg. All materials contained in this product are considered to have low toxicity by the expected routes of exposure.

**Possible target organs:** All tissue (possibly irritation).

**Medical conditions that may be aggravated by exposure:** NDA

**Carcinogens:** None as per OSHA, NTP, IARC, or California Proposition 65

**12. ECOLOGICAL INFORMATION**

**Environmental stability:** Stable

**Effect of material on plants or animals:** Highly beneficial to plant life

**Effect or product on aquatic life:** No known adverse effects

**Environmental fate:** NDA

**13. DISPOSAL CONSIDERATIONS**

Waste disposal must be in accordance with Federal, state, and local regulations. Be aware that the waste owner has responsibility for final disposal. Regulations may also apply to empty containers, liners or rinsate. Laws may change or be reinterpreted; state and local regulations may be different from Federal regulations. This information applies to materials as manufactured; contamination or processing may change waste characteristics and requirements.

**14. TRANSPORTATION INFORMATION**

**DOT Proper Shipping Description:** Not regulated as a hazardous material

**15. REGULATORY INFORMATION**

**Chemical Inventories:** All components of this product listed in Section 2 are included on the TSCA inventory list, the DSL/NDSL, and the EINECS.

**CERCLA Reportable Quantities (RQ):** None

**SARA TITLE III (Superfund Amendments and Reauthorization Act):**

Section 302 Extremely Hazardous Materials: None

Section 304 Notification Of Accidental Release: None

Sections 311/312 Hazard Categories:

Immediate (Acute) Health Effects: YES

Delayed (Chronic) Health Effects: NO

Fire Hazard: NO

Sudden Release of Pressure Hazard: NO

Reactivity Hazard: NO

Section 313 Toxic Chemical Release Reporting: None

**California Proposition 65:** None of the components of this product listed in Section 2 are listed on the State of California's Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) list of chemicals known to cause reproductive toxicity or cancer.

**STATE REGULATORY INFORMATION:** Since each state has the authority to promulgate standards more stringent than the Federal government, this section cannot provide an inclusive list of all state regulations that apply to this product. Questions related to state regulations should be directed toward local officials.

## 16. OTHER INFORMATION

For additional information, refer to the American Conference of Governmental Industrial Hygienists (ACGIH) documentation of TLV's (Threshold Limit Values) for individual components and the 1996 North American Emergency Response Guidebook.

**Prepared by: Scotts Miracle-Gro Products, Inc.  
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